

CLAIMS

WHAT IS CLAIMED IS:

1. A decorative sheet comprising a base film made of a thermoplastic polyester resin and a decorative layer on the base film, the base film being not broken in both of MD (a flow direction of film-forming) and TD (a direction perpendicular to MD) and having a stress of 20 N/cm² or less in any of MD and TD, each under a 200% elongation at 80°C.
2. The decorative sheet according to claim 1, wherein the thermoplastic polyester resin is a polyethylene terephthalate-based resin.
3. The decorative sheet according to claim 1 or 2, for use in the production of decorated resin moldings by a decorating injection molding method.
4. A decorated resin molding comprising a resin molding and the decorative sheet as defined in any of claims 1 to 3 which is united with the resin molding by lamination such that the decorative layer of the decorative sheet faces toward the resin molding.
5. A decorated resin molding comprising a resin molding and a decorative layer bonded to the resin molding, the decorative layer being formed from the decorative sheet as defined in any of claims 1 to 3 by removing the base film.
6. A method of producing a decorated resin molding, which comprises the following sequential steps:
 - (A) a step of preforming a decorative sheet by disposing the decorative sheet as defined in any of claims 1 to 3 so as to allow the base film of the decorative sheet to face toward a mold surface having a given shape in a movable mold, and then, softening the decorative sheet by heating while bringing the softened decorative sheet into close contact with the mold surface by vacuum suction from a side of the movable mold;
 - (B) a step of injection molding by clamping the movable mold holding the decorative sheet which is brought into contact with the mold surface and a stationary mold, injecting a fluidized resin molding compound to fill a cavity

formed between the molds, and then solidifying the fluidized resin molding compound thus injected, thereby forming a resin molding united with the decorative sheet by lamination, and

5 (C) a step of taking the resin molding laminated with the decorative sheet with its entire layers out of the molds after separating the movable mold from the stationary mold.

7. A method of producing a decorated resin molding, which comprises the following sequential steps:

10 (A) a step of preforming a decorative sheet by disposing the decorative sheet as defined in any of Items 1, 2 and 3 so as to allow the base film of the decorative sheet to face toward a mold surface having a given shape in a movable mold, and then, softening the decorative sheet by heating while bringing the softened decorative sheet into close contact with the mold surface by vacuum suction from a side of the movable mold;

15 (B) a step of injection molding by clamping the movable mold holding the decorative sheet which is brought into contact with the mold surface and a stationary mold, injecting a fluidized resin molding compound to fill a cavity formed between the molds, and then solidifying the fluidized resin molding compound thus injected, thereby forming a resin molding united with the decorative sheet by lamination, and

20 (C') a step of separating the movable mold from the stationary mold, and taking the resin molding laminated with the decorative sheet out of the molds while leaving the base film of the decorative sheet in the movable mold, or taking the resin molding laminated with the decorative sheet with its entire layers and then peeling off the base film from the decorative sheet.

25 8. The method according to claim 6 or 7, wherein the movable mold and the stationary mold constitute matching male and female molds.